

REMARKS

Claims 2-22 are presently pending in the application. Claims 1-7, 9-14 and 17-21 are rejected. Claims 8, 15, 16 and 22 are objected to. Claim 1 has been cancelled. Claims 2, 5 and 10 have been amended. The specification and drawings stand as filed.

Reconsideration of the objections and rejections set forth in the aforementioned Office Action is respectfully requested in view of the following remarks. The basis for the amendments can be found throughout the Specification, Claims and Drawings as originally filed.

REJECTION UNDER 35 U.S.C. § 102

Claims 1 and 5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kato et al. (U.S. Pat. No. 4,144,864).

Applicants have cancelled claim 1 and amended claim 5 to depend from currently amended claim 2. Accordingly, Applicants respectfully request withdrawal of the § 102 rejection.

Claims 1-7, 9-14 and 17-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Iizuka (U.S. Pat. No. 4,107,921).

Applicants have cancelled claim 1 and placed claim 2 in independent form and include all the limitations of original claim 1. This amendment is made not for reasons of patentability but to simply present claim 2 in independent form having all of the limitations as originally filed.

Applicants respectfully submit that Iizuka does not disclose an engine control system as defined by originally filed claim 2. Specifically, claim 2 recites that "transitioning the engine from the activated to the deactivated mode includes closing said first throttle and opening said second throttle" in addition to the other limitations recited in the claim. At Col. 10, lines 56-62, Iizuka discloses "When the load on the engine is thereafter diminished, then the cylinder cut-off control circuit 56 controls the fuel-injection system in such a manner as to cut off the delivery of fuel from the fuel injection nozzles 21 and 22 for one pair of power cylinders 11 and 11 [sic] or the fuel injection nozzles 23 and 24 for the other pair of power cylinders 13 and 14." Applicants respectfully submit that Iizuka describes a known method for deactivating cylinders that

produces a fluctuation in the drive torque output of the engine. As noted in Applicants' Background of the Invention and Summary of the Invention sections, the present invention provides an engine control system for maintaining a smooth output torque during transitions between displacements in the displacement on demand engine. Furthermore, Iizuka explicitly states that "when the power cylinders 11 and 12 are thus held in the inoperative conditions, it is preferable that the throttle valve 35 in the intake passageway 30a leading to the particular power cylinders be controlled to be fully open for the purpose of minimizing the pumping loss of the engine." Applicants respectfully submit that cutting off the delivery of fuel from the fuel injection nozzles and positioning the throttle valve in a fully open position is not a disclosure of the engine control system presently defined by claim 2 where transitioning the engine from the activated mode to the deactivated mode includes closing the first throttle and opening the second throttle. Applicants' invention is further distinguished from the disclosure of Iizuka by referencing claim 9 and noting that the fuel supply to the first throttle is discontinued after the first throttle is closed. In this manner, a smooth transition between activated and deactivated modes is obtained.

With reference to claims 10 and 11, claim 10 has been placed in independent form to include all of the limitations of originally filed claim 1. Applicants respectfully submit that claim 10 has not been amended for reasons related to patentability but has simply been placed in independent form due to the cancellation of claim 1.

Claim 10 recites that "transitioning the engine from the deactivated mode to the activated mode includes opening said first throttle and closing said second throttle." Applicants respectfully submit that Iizuka does not disclose an engine control system as defined by claim 10. On the contrary, the Iizuka system is described to react to an increased load by enabling the fuel injection nozzles to deliver fuel to the intake ports of the cylinders and controlling throttle valves 35 and 36 so that the air-fuel mixture provided in the individual power cylinders is regulated to have an air-to-fuel ratio within a predetermined range that will enable the catalytic converter 20 to exhibit its maximum conversion efficiency. The problem solved by Iizuka relates to assuring that the catalytic converter exhibits its maximum conversion efficiency. This is not a disclosure of one throttle valve being opened and another throttle valve being closed while the

engine is transitioned from a deactivated mode to an activated mode. Iizuka does not disclose closing a throttle while opening another throttle.

With specific reference to claim 11, Applicants respectfully submit that Iizuka does not disclose initiating the delivery of fuel to previously deactivated cylinders at an idle rate when transitioning from a deactivating mode to the activating mode. As previously mentioned, Iizuka discusses controlling throttles to enable the catalytic converter to exhibit its maximum conversion efficiency. This statement is not a disclosure of the elements of claim 11. Accordingly, Applicants respectfully request withdrawal of the § 102 rejection relating to claims 2-7 and 9-11.

With reference to claim 12, Applicants respectfully submit that Iizuka does not disclose a method including the step of transitioning from an activated mode to a deactivated mode where the step of transitioning includes closing a first throttle and opening a second throttle. Applicants respectfully rely on the arguments previously set forth noting that the Iizuka patent discloses cutting off the fuel supply to individual fuel injection nozzles and opening the throttle associated with the cylinders that are to be placed in a deactivated mode. As such, Applicants respectfully request withdrawal of the § 102 rejections related to claims 12-14 and 17-21.

ALLOWABLE SUBJECT MATTER

Claims 8, 15, 16 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants would like to thank the Examiner for identifying allowable subject matter. However, Applicants wish to pursue a possible withdrawal of the § 102 rejections as requested above.

CONCLUSION

All of the grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding office action, and as such, the present application is in condition for allowance.

If it is believed that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600. Prompt and favorable consideration of this amendment is respectfully requested.

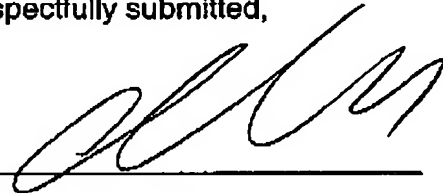
If for some reason a fee needs to be paid, please charge Deposit Account No. 07-0960 for the fees, which may be due.

Respectfully submitted,

Dated

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By



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